EL PASO FIELD SERVICES
PRODUCTION PIT CLOSURE

DEC 2 1 1998

RECEIVED
JUL 2 1998
OIL CON. DIV.
DIST. 3

CULLINS FED #4
Meter/Line ID - 92010

SITE DETAILS

Legals - Twn: 24 **Rng:** 03 **Sec:** 04 **Unit:** M
NMOCD Hazard Ranking: 40 **Land Type:** 2 - Federal
Operator: MERIDIAN OIL INC **Pit Closure Date:** 10/12/94

RATIONALE FOR RISK-BASED CLOSURE:

The above mentioned production pit was assessed and ranked according to the criteria in the New Mexico Conservation Division's Unlined Surface Impoundment Closure Guidelines.

The primary source, discharge to the pit, has been removed. There has been no discharge to the production pit for at least five years and the pit has been closed for at least three years.

The production pit has been remediated to the practical extent of the trackhoe or to the top of bedrock. Initial laboratory analysis has indicated that the soil remaining at the bottom of the excavation is above standards based on the hazard ranking score. Contaminated soil was removed and transported to an approved landfarm for disposal. The initial excavation was backfilled with clean soil and graded in a manner to divert precipitation away from the excavated area. Any rainfall that does infiltrate the ground surface must migrate through clean backfill before reaching any residual hydrocarbons remaining in the soil. Therefore, further mobility of residual hydrocarbons is unlikely.

Since the soil samples from the initial excavation were above standards, a test boring was drilled and a sample was collected to evaluate the vertical extent of impact to soils. Test boring sample results indicated soils below standards beneath the original excavation.

El Paso Field Services Company (EPFS) requests closure of the above mentioned production pit location for the following reasons:

- Discharge to the pit has not occurred in over five years and the pit has been closed for over three years.
- The bulk of the impacted soil was removed during the initial excavation.
- The excavation was backfilled with clean soil and graded to divert precipitation away from the excavation area.
- All source material has been removed from the ground surface, eliminating potential direct contact with livestock and the general public.
- Groundwater was not encountered in the initial excavation or test boring; therefore, impact to groundwater is unlikely.
- Soil samples collected beneath the initial excavation were below standards.
- No potential receptors are within 1,000 feet of the site.
- Residual hydrocarbons remaining in the soil at the bottom of the initial excavation will naturally degrade in time with minimal risk to the environment.

FIELD PIT SITE ASSESSMENT FORM

GENERAL

Meter: 92010 Location: Cullins Fed. No. 4
Operator #: 2999 Operator Name: MOI P/L District: OJITO
Coordinates: Letter: M Section 4 Township: 24 Range: 3
Or Latitude _____ Longitude _____
Pit Type: Dehydrator ___ Location Drip: ✓ Line Drip: ___ Other: _____
Site Assessment Date: 6/15/94 Area: 08 Run: 83

SITE ASSESSMENT

NMOCD Zone: (From NMOCD Maps)
Inside ☒ (1)
Outside ☐ (2)

Land Type:
BLM ☒ (1)
State ☐ (2)
Fee ☐ (3)
Indian _____

Depth to Groundwater
Less Than 50 Feet (20 points) ☒ (1)
50 Ft to 99 Ft (10 points) ☐ (2)
Greater Than 100 Ft (0 points) ☐ (3)

Wellhead Protection Area :
Is it less than 1000 ft from wells, springs, or other sources of fresh water extraction? , or ; Is it less than 200 ft from a private domestic water source? ☐ (1) YES (20 points) ☒ (2) NO (0 points)

Horizontal Distance to Surface Water Body
Less Than 200 Ft (20 points) ☒ (1)
200 Ft to 1000 Ft (10 points) ☐ (2)
Greater Than 1000 Ft (0 points) ☐ (3)
Name of Surface Water Body Leeson Canyon
(Surface Water Body : Perennial Rivers, Major Wash, Streams, Creeks, Irrigation Canals, Ditches, Lakes, Ponds)
Distance to Nearest Ephemeral Stream ☐ (1) < 100' (Navajo Pits Only)
☐ (2) > 100'

TOTAL HAZARD RANKING SCORE: 40 **POINTS**

REMARKS

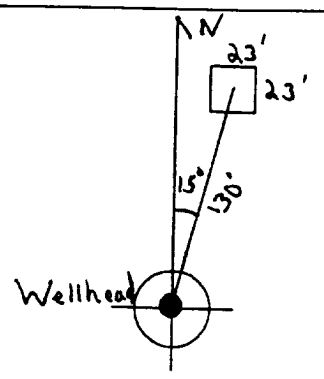
Remarks : Redline Book - Inside Vulnerable Zone Topo - Inside
2 pits. Will close. Pit has small amount of liquid in it
DIG & HAUL

ORIGINAL PIT LOCATION

ORIGINAL PIT LOCATION

Original Pit : a) Degrees from North 15° Footage from Wellhead 130'

b) Length : 23' Width : 23' Depth : 4'



REMARKS

Remarks :

Pictures @ 0838 (9-13)

End Dump

Completed By:

Corey Chase
Signature

6/15/94
Date

PHASE I
EXCAVATION

FIELD PIT REMEDIATION/CLOSURE FORM

GENERAL

Meter: 92010 Location: Collins Fed No. 4

Coordinates: Letter: M Section 4 Township: 24 Range: 3

Or Latitude _____ Longitude _____

Date Started : 10/12/94 Run: 08 83

FIELD OBSERVATIONS

Sample Number(s): KD 333 _____ _____ _____

Sample Depth: 6' Feet

Final PID Reading 450 ppm PID Reading Depth 6' Feet

	Yes	No
Groundwater Encountered	☐	☒

Approximate Depth _____ Feet

CLOSURE

Remediation Method :

Excavation ☒ Approx. Cubic Yards 20

Onsite Bioremediation ☐

Backfill Pit Without Excavation ☐

Soil Disposition:

Envirotech ☒ ☐ Tierra

Other Facility ☐ Name: _____

Pit Closure Date: 10/12/94 Pit Closed By: BEI

REMARKS

Remarks : Excavated pit to 6', Hit Sandstone, Took PID Sample, closed pit.

Signature of Specialist: Kelly Dean

(SP3191) 03/16/94

Natural Gas Company

FIELD SERVICES LABORATORY
ANALYTICAL REPORT
PIT CLOSURE PROJECT - Soil Samples Inside the GWV Zone

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	KD 333	94640
MTR CODE | SITE NAME:	92010	N/A
SAMPLE DATE | TIME (Hrs):	10-12-94	0845
SAMPLED BY:	N/A	
DATE OF TPH EXT. | ANAL.:	10-17-94	10-17-94
DATE OF BTEX EXT. | ANAL.:	10-19-94	10-21-94
TYPE | DESCRIPTION:	VC	Brown/gray sand + clay

REMARKS: _____

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE	20.5	MG/KG	20			
TOLUENE	5.5	MG/KG	20			
ETHYL BENZENE	3.2	MG/KG	20			
TOTAL XYLENES	76	MG/KG	20			
TOTAL BTEX	85.2	MG/KG				
TPH (418.1)	2650	MG/KG			0.20	28
HEADSPACE PID	450	PPM				
PERCENT SOLIDS	88.9	%				

-- TPH is by EPA Method 418.1 and BTEX is by EPA Method 8020 --

The Surrogate Recovery was at 121 % for this sample All QA/QC was acceptable.

Narrative:

ATI Results attached. Surrogate Recovery outside ATI QC limits due to matrix interference

DF = Dilution Factor Used

Approved By: _____ Date: 10/3/94

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**********************************************
*                Test Method for             *
*     Oil and Grease and Petroleum Hydrocarbons *
*              in Water and Soil             *
*                                            *
*          Perkin-Elmer Model 1600 FT-IR     *
*               Analysis Report              *
**********************************************

 01/13/17  13:00

  Sample identification
 BLANK

  Initial mass of sample, g
 0.200

  Volume of sample after extraction, ml
 28.000

  Petroleum hydrocarbons, ppm
 26461.593
  Net absorbance of hydrocarbons (2930 cm-1)
 0.333
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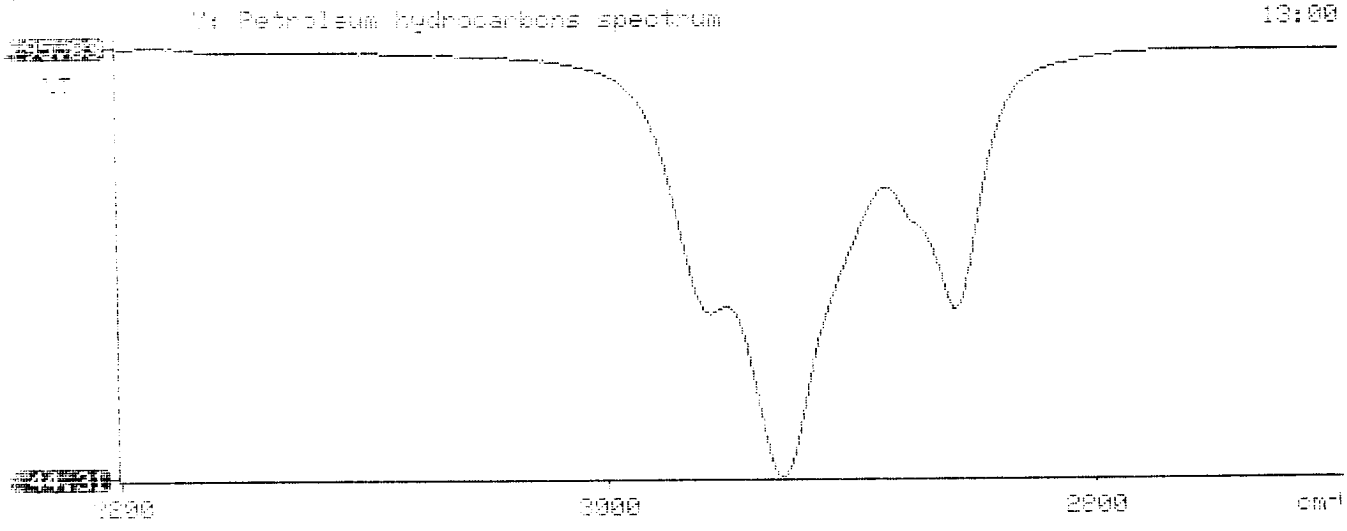


Analytical Technologies, Inc.

2709-D Pan American Freeway, NE Albuquerque, NM 87107
Phone (505) 344-3777 FAX (505) 344-4413

ATI I.D. **410405**

October 26, 1994

El Paso Natural Gas Company
P.O. Box 4990
Farmington, NM 87499

Project Name/Number: PIT CLOSURE 24324

Attention: John Lambdin

On **10/18/94**, Analytical Technologies, Inc., (ADHS License No. AZ0015), received a request to analyze **non-aqueous** samples. The samples were analyzed with EPA methodology or equivalent methods. The results of these analyses and the quality control data, which follow each set of analyses, are enclosed.

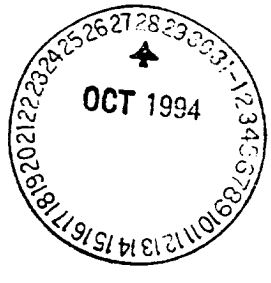
If you have any questions or comments, please do not hesitate to contact us at (505) 344-3777.

Letitia Krakowski, Ph.D.
Project Manager

H. Mitchell Rubenstein, Ph.D.
Laboratory Manager

MR:jt

Enclosure



Analytical Technologies, Inc.

GAS CHROMATOGRAPHY RESULTS

TEST : BTEX (EPA 8020)

CLIENT : EL PASO NATURAL GAS CO. ATI I.D.: 410405

PROJECT # : 24324

PROJECT NAME : PIT CLOSURE

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
19	946410	NON-AQ	10/12/94	10/19/94	10/21/94	20
20	946411	NON-AQ	10/12/94	10/19/94	10/20/94	1
21	946412	NON-AQ	10/12/94	10/19/94	10/21/94	20

PARAMETER	UNITS	19	20	21
BENZENE	MG/KG	<0.5	<0.025	6.7
TOLUENE	MG/KG	5.5	<0.025	89
ETHYLBENZENE	MG/KG	3.2	<0.025	11
TOTAL XYLENES	MG/KG	76	<0.025	110
SURROGATE:				
BROMOFLUOROBENZENE (%)		121*	97	99

*OUTSIDE ATI QUALITY CONTROL LIMITS DUE TO MATRIX INTERFERENCE

PHASE II

RECORD OF SUBSURFACE EXPLORATION

Borehole # BH-1
Well #
Page 1 of 1

PHILIP ENVIRONMENTAL
4000 Monroe Road
Farmington, New Mexico 87401
(505) 326-2262 FAX (505) 326-2388

Project Name EPNG PITS
Project Number 14509 Phase 6000 77
Project Location Cullins Fed #4 92010

Elevation
Borehole Location
GWL Depth
Logged By CM Chance
Drilled By ~~M. Donahue~~ K. Padilla
Date/Time Started 5/25/95 - 0810
Date/Time Completed 5/25/95 - 0945

Well Logged By CM Chance
Personnel On-Site M. Donahue, K. Padilla, F. Rivera
Contractors On-Site
Client Personnel On-Site

Drilling Method 4 1/4 I.D. HSA
Air Monitoring Method PID, CGI

Depth (Feet)	Sample Number	Sample Interval	Sample Type & Recovery (inches)	Sample Description Classification System: USCS	USCS Symbol	Depth Lithology Change (feet)	Air Monitoring Units: ~~NDD~~ PPM BZ	BH	S HS	Drilling Conditions & Blow Counts
0				Backfill to 6'						
5										
10	1	10-12	6"	Gry silty Clay, med stiff, med plastic sl moist,			0	20	37/004	-0827 hr
15	2	15-17	4"	1/4 Br silty SAND, vF-F Sand, loose, dry			0	4	4/56	-0829
20	3	20-22	5"	AA			0	4	9/10	-0855
				TOB 20'						
25										
30										
35										
40										

Comments: 20-22' sample submitted to lab (BTEX, TPH) CMC 24

Geologist Signature

Phase II

El Paso Natural Gas Company

FIELD SERVICES LABORATORY
ANALYTICAL REPORT
PIT CLOSURE PROJECT - Soil Samples Inside the GWV Zone

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	CMC 24	946835
MTR CODE | SITE NAME:	92010	N/A
SAMPLE DATE | TIME (Hrs):	5-25-95	0855
SAMPLED BY:	N/A	
DATE OF TPH EXT. | ANAL.:	5-30-95	5.30-95
DATE OF BTEX EXT. | ANAL.:	6-1-95	6-2-95
TYPE | DESCRIPTION:	VG	Light brown sand

REMARKS: _____

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE	< 0.025	MG/KG	1			
TOLUENE	< 0.025	MG/KG	1			
ETHYL BENZENE	< 0.025	MG/KG	1			
TOTAL XYLENES	< 0.025	MG/KG	1			
TOTAL BTEX	< 0.10	MG/KG				
TPH (418.1)	41.8 42 for 8015	MG/KG			2.02	28
HEADSPACE PID	10	PPM				
PERCENT SOLIDS	93.9	%				

-- TPH is by EPA Method 418.1 and BTEX is by EPA Method 8020 --

The Surrogate Recovery was at 100 % for this sample All QA/QC was acceptable.

Narrative:

ATI Results attached

DF = Dilution Factor Used

Approved By: _____ Date: 6/28/95

Test Method for
Oil and Grease and Petroleum Hydrocarbons
in Water and Soil

Perkin-Elmer Model 1600 FT-IR
Analysis Report

95/09/30 14:25

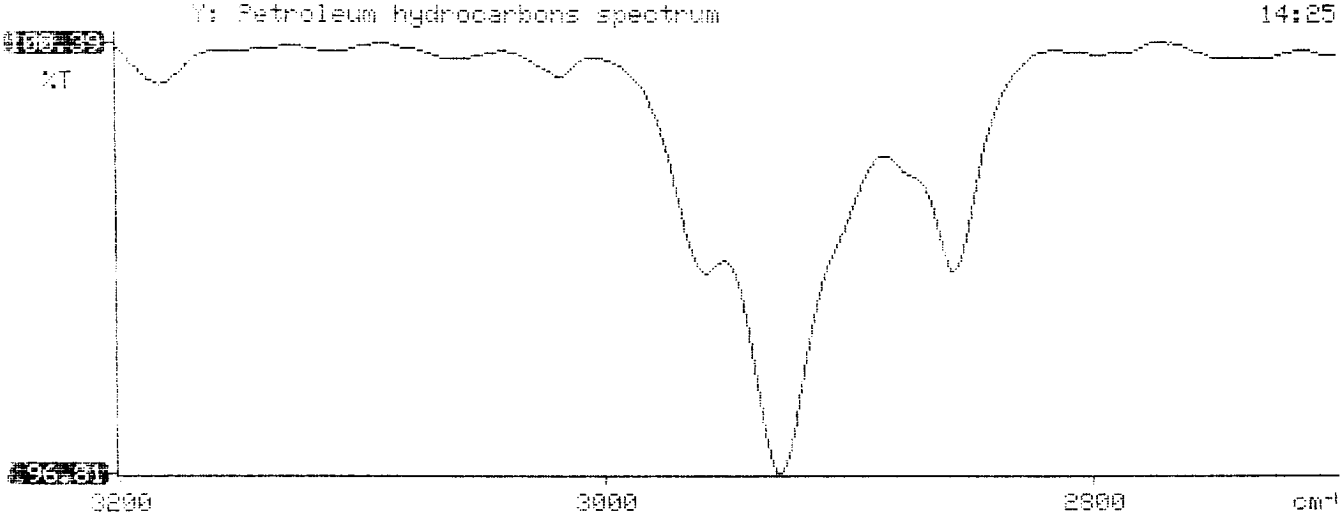
Sample Identification
946835

Initial mass of sample, g
2.020

Volume of sample after extraction, ml
28.000

Petroleum hydrocarbons, ppm
41.617

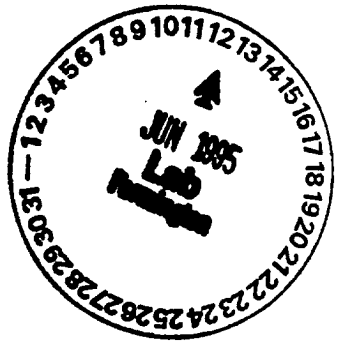
Net absorbance of hydrocarbons (2930 cm-1)
0.015



Analytical **Technologies,** Inc.

2709-D Pan American Freeway, NE Albuquerque, NM 87107
Phone (505) 344-3777 FAX (505) 344-4413

ATI I.D. **506301**



June 8, 1995

El Paso Natural Gas Co.
P.O. Box 4990
Farmington, NM 87499

Project Name/Number: PIT CLOSURE 24324

Attention: John Lambdin

On **06/01/95**, Analytical Technologies, Inc., (ADHS License No. AZ0015), received a request to analyze **non-aqueous** samples. The samples were analyzed with EPA methodology or equivalent methods. The results of these analyses and the quality control data, which follow each set of analyses, are enclosed.

If you have any questions or comments, please do not hesitate to contact us at (505) 344-3777.

for

Letitia Krakowski, Ph.D.
Project Manager

H. Mitchell Rubenstein, Ph.D.
Laboratory Manager

MR:jt

Enclosure

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY RESULTS

TEST : BTEX, MTBE (EPA 8020)

CLIENT : EL PASO NATURAL GAS CO. ATI I.D.: 506301

PROJECT # : 24324

PROJECT NAME : PIT CLOSURE

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
01	946835	NON-AQ	05/25/95	06/01/95	06/02/95	1
02	946836	NON-AQ	05/25/95	06/01/95	06/02/95	1
03	946837	NON-AQ	05/25/95	06/01/95	06/02/95	1

PARAMETER	UNITS	01	02	03
BENZENE	MG/KG	<0.025	<0.025	<0.025
TOLUENE	MG/KG	<0.025	<0.025	<0.025
ETHYLBENZENE	MG/KG	<0.025	<0.025	<0.025
TOTAL XYLENES	MG/KG	<0.025	<0.025	<0.025
METHYL-t-BUTYL ETHER	MG/KG	<0.12	<0.12	<0.12
SURROGATE:				
BROMOFLUOROBENZENE (%)		100	92	95